UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,582	02/17/2006	Takashi Kikukawa	286321US0PCT	6498
22850 OBLON SPIV	7590 01/15/2008 AK MCCLELLAND M	IAIER & NEUSTADT, P.C.	EXAMINER	
1940 DUKE STREET			BLOUIN, MARK S	
ALEXANDRI	A, VA 22314		ART UNIT	PAPER NUMBER
			2627	
			NOTIFICATION DATE	DELIVERY MODE
			01/15/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	Application No.	Applicant(s)				
	10/568,582	KIKUKAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
,	Mark Blouin	2627				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wit	h the correspondence add	ress			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 136(a). In no event, however, may a re will apply and will expire SIX (6) MONT e, cause the application to become ABA	ATION. ply be timely filed  "HS from the mailing date of this con ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	·					
2a) This action is <b>FINAL</b> 2b) ☑ This	s action is non-final.					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	•			
Disposition of Claims						
4) Claim(s) 1-10 is/are pending in the application	1.					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10</u> is/are rejected.	6)⊠ Claim(s) <u>1-10</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) ☐ The specification is objected to by the Examine	er.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyand	e. See 37 CFR 1.85(a).	•			
Replacement drawing sheet(s) including the correct	, -,	•	• •			
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attached	Office Action or form PTC	D-152.			
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreigr a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
• •	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)		ımmary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)		/Mail Date formal Patent Application				
Paper No(s)/Mail Date <u>5/9/06.11/16/07,2/17/06</u> .	6) Other:					

10/568,582 Art Unit: 2627

## **Detailed Action**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Miura et al (USPub 2005/0259552).
- 3. Regarding Claims 1,7, and 8, Miura et al shows (Figs. 1-10) an optical recording medium comprising: a substrate (11), a noble-metal oxide layer (22) provided on the substrate, a first dielectric layer (23) provided on a light-incidence plane side when viewed from the noble-metal oxide layer and a second dielectric layer (21) provided on the side opposite to the light-incidence plane when viewed from the noble-metal oxide layer, the second dielectric layer containing ZnS or a mixture of ZnS and SiO2 as a main component [0068], wherein the proportion of ZnS to the sum of ZnS and SiO2 is set at a value from 60 mole % to 100 mole %.
- 4. Regarding Claim 2, Miura et al shows (Figs. 1-10) an optical recording medium, further comprising, on the side opposite to the light-incidence plane when viewed from the second dielectric layer (21), a light absorption layer (33) and a third dielectric layer (32) arranged in this order when viewed from the second dielectric layer.

10/568,582 Art Unit: 2627

- 5. Regarding Claim 3, Miura et al shows (Figs. 1-10) an optical recording medium, further comprising a reflective layer (31) provided between the substrate and the third dielectric layer (32).
- 6. Regarding Claim 5, Miura et al shows (Figs. 1-10) an optical recording medium, wherein the light absorption layer contains as a main component a material which can be represented by (Sb<sub>a</sub>Te<sub>1-a</sub>) <sub>1-b</sub> MA<sub>b</sub> (wherein MA is an element other than antimony (Sb) and tellurium (Te), 0 < a < 1 and  $0 \le b < 1$ ), and besides which is different from an intermetallic compound represented by {(GeTe)<sub>c</sub>(Sb<sub>2</sub>Te<sub>3</sub>)<sub>1-e</sub>}<sub>d</sub>MB<sub>1-d</sub>(wherein MB is an element other than antimony (Sb), tellurium (Te) and germanium (Ge), c is 1/3, 1/2 or 2/3, and  $0 < d \le 1$ ) (see [0061]).
- 7. Regarding Claim 6, Miura et al shows (Figs. 1-10) an optical recording medium, wherein a light-transmitting layer (13) having the light-incidence plane is further provided on the side opposite to the substrate (11) side when viewed from the first dielectric layer (23), the substrate is from 0.6 mm to 2.0 mm [0045] in thickness and the light-transmitting layer is from 10  $\mu$ m to 200  $\mu$ m in thickness [0055].
- 8. Regarding Claims 9 and 10, Miura et al shows (Figs. 1-10) a data recording/reproducing method in which data is recorded/played back on an optical recording medium by irradiation with a laser beam from the light-transmitting layer side, wherein, when the wavelength of the laser beam is represented as  $\lambda$ , and the numerical aperture of an objective lens for focusing the laser beam is represented as NA,  $\lambda$  /NA is set at 640 nm or below and a string of recording marks including recording marks  $\lambda$  /4NA or below in length is recorded [0085-0087].

10/568,582

Art Unit: 2627

## Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al (USPub 2005/0259552).
- 11. Regarding Claim 4, Miura et al shows (Figs. 1-10), all the features described, *supra*, but does not show an optical recording medium, wherein the noble-metal oxide layer contains platinum oxide (PtO<sub>x</sub>).

Miura does not set forth the material of Platinum. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the noble metal oxide layer of Miura with the claimed materials through routine experimentation and optimization in the absence of criticality. More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Swain et al.*, 33 CCPA (Patents) 1250, 156 F.2d 239 70 USPQ 412; *Minnesota Mining and Mfg. Co. v Coe*, 69 App. D.C. 217, 99 F. 2d 986, 38 USPQ 213; *Allen et al. v Coe*, 77 App. D.C. 324, 135 F. 2d 11, 57 USPQ 136.

The rationale is as follows: One of ordinary skill in the art would have been motivated to provide the noble metal oxide layer of Miura with platinum since it is a substitution of noble metals and would provide the same effect.

10/568,582 Art Unit: 2627

## Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bill Korzuch, can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark/Blouin
Patent Examiner
Art Unit 2627

January 4, 2008